

SOME NEW INJURIOUS WEEVILS.

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(PLATE VII.)

Subfamily BRACHYDERINAE.

Tanymecus destructor, sp. nov. (Pl. vii, fig. 5).

Colour piceous black; the head with dark brown scaling above, except for a line of pale scales bordering the eye, and with pale buff scales beneath; scaling of the prothorax brown or grey brown on the disk, an ill-defined dark brown stripe at the side, and grey or buff beneath; scaling on the elytra grey or brown, with a very ill-defined darker stripe between striae 2 and 5, usually vanishing at a short distance from the base, but often traceable to behind the middle in the form of spots.

♂♀. *Head* with shallow, confluent and longitudinally striolate punctation; the forehead at its narrowest not narrower than the base of the rostrum, and without any central fovea or carina; the eyes very short oval, moderately convex. *Rostrum* a little shorter than the head, gradually narrowed from base to apex, and the dorsal area more markedly so, so that both scrobes are visible at the same time directly from above for almost the whole length; the dorsal area flat, sculptured like the head, and with a mere trace of a carina on the anterior half, the apical margin only shallowly sinuate. *Antennae* with the scape reaching the hind margin of the eye; the funicle with joint 1 longer than 2, and 2 as long as 3+4; 3 to 7 subequal. *Prothorax* a little longer than broad (♂) or a little broader than long (♀), broadest at the middle, the sides rather strongly and regularly rounded; the apex and base of equal width and both slightly arcuate, the apical margin rather oblique in lateral view; the dorsum evenly convex and with fine confluent punctation throughout. *Scutellum* inconspicuous. *Elytra* subtruncate at the base, separately rounded at the apex, with very sloping shoulders and without any humeral angle, the sides gently rounded and markedly narrower in the ♂ than in the ♀, and without any posterior callus; the striae fine, shallow and shallowly punctate; the intervals even, almost flat and finely shagreened; the numerous short recumbent scale-like setae hardly distinguishable from the narrow true scales. *Legs* densely clothed with variegated scales and setae; the front femora thicker than the others, the two anterior pairs bearing long erect hairs beneath on the basal half in the ♂; the hind tarsi with joint 1 as long as 2+3, and 2 longer than 3.

Length, 6–8 mm.; *breadth*, 2–3 mm.

S. RHODESIA: Salisbury, 5,000 feet, xi–xii. 1894 (G.A.K.M.); Mazoe, 4,000 feet, xii. 1919 (R. W. Jack).

Described from 17 ♂♂ and 19 ♀♀.

Of the described South African species, this insect is most nearly allied to *T. inafectatus*, Fhs., which has similarly sloping shoulders, the scape reaching to the hind margin of the eye, and similar hind tarsi. On the other hand the latter is a larger insect (10–12 mm.), with the rostrum as long as the head; joint 2 of the

funicle is as long as 1, and longer than 2+3; the scales on the elytra are much smaller, etc.

This wingless terrestrial species is abundant in the Salisbury district, and according to Mr. Jack, Government Entomologist, Southern Rhodesia, the adults sometimes cause considerable damage to the maize crops by eating off the young plants as soon as they appear above ground. They also feed on the leaves of other crops, such as sweet potatoes.

Tanymecus agricola. sp. nov. (Pl. vii, fig. 6).

Colour black, variegated with greyish buff scaling and light and dark brown setae; the pronotum with three indistinct dark stripes; the elytra with several indefinite interrupted dark lines.

♂♀. *Head* with rather coarse longitudinally confluent punctation; the forehead not narrower than the base of the rostrum and without any central fovea or carina; the eyes almost circular and rather strongly convex. *Rostrum* as long as the head and parallel-sided, the apex asymmetrically emarginate in the middle, the right side of the angle being rounded and the left straight; the dorsal area parallel-sided, shallowly impressed in the middle, with a well-marked narrow median carina, the sculpturing like that of the head. *Antennae* with the scape elongate, reaching beyond the front margin of the prothorax; the funicle with the two basal joints equal, 2 equal to 3+4, and 3 to 7 subequal. *Prothorax* longer than broad in both sexes, gently rounded at the sides, broadest a little before the middle, and with a faint apical constriction; the apex slightly narrower than the base, and both margins very gently arcuate, the apical margin oblique at the sides; the dorsum evenly convex, with close confluent punctation throughout; the short broad recumbent setae pale on the areas of pale scaling and dark brown elsewhere. *Scutellum* elongate, with dense whitish scales. *Elytra* jointly sinuate at the base, with rounded humeral angles, parallel-sided from the shoulders to beyond the middle, and impressed on each side before the apex, which is jointly rounded; the striae rather deep, especially towards the apex, but partly hidden by the scaling towards the sides, the punctures large at the base and becoming smaller behind; the intervals not broader than the punctures on the disk, slightly convex and shagreened; the pale areas formed of short oval or almost circular scales, mixed with numerous pale short flat curved setae, the dark areas only with similar dark brown setae. *Legs* grey, the femora with an indistinct pale spot beyond the middle; the front femora slightly thicker than the others, the two anterior pairs in the ♂ clothed with long hairs beneath on the basal half; the hind tarsi with joint 1 as long as 2 + 3, and 2 equal to 3.

Length, 7–8 mm.; *breadth*, 2.2–2.8 mm.

S. RHODESIA: Gwelo, i. 1920 (*R. Lowe Thompson*).

Described from 2 ♂♂ and 2 ♀♀.

Although very similar in general facies to *T. destructor*, this species may readily be distinguished by its longer and parallel-sided rostrum, more convex eyes, much longer scape, broad scales, etc.

It has also been found feeding upon maize.

Subfamily OTIORRHYNCHINAE.

Isaniris ater, sp. nov. (Pl. vii, fig. 1).

Colour uniform dull black, the elytra with a small spot formed of small elongate white scales near the base of the 5th row of punctures, and sometimes smaller ones on the 7th and 9th, also a lateral row of similar spots near the margin, and occasionally traces of another a little above it.

♂♀. *Head* with coarse shallow punctation and a deep median furrow, and sparsely set with short spatulate white setae; the eyes moderately convex, deepest in the middle. *Rostrum* broad, gradually dilated at the apex, which is deeply sinuate in the middle, the epistome not carinate on its posterior edge; the dorsal area broad, regularly widening to the apex, broadly impressed in front, almost flat in the basal half, and there coarsely punctate and with a broad smooth median carina, which is highest at the base; the basal incision gently curved; a longitudinal lateral ridge running from the scrobe to the eye. *Antennae* black, with recumbent pale setae; the scape not much curved, moderately slender and rather abruptly clavate; the funicle with joints 1 to 6 progressively diminishing, 7 as long as 4. *Prothorax* broader than long, strongly rounded at the sides, broadest at the middle, truncate at base and apex, the base being narrowly carinate and a little broader than the apex; the dorsum covered with large flattened contiguous granules mostly forming irregular pentagons, each with a setiferous puncture; laterally the granules become elongate and less defined. *Elytra* narrowly ovate in the ♂, much broader in the ♀, broadest not far from the base, each with about 18 rows of punctures running in pairs, but becoming rather irregular towards the sides and apex; the intervals between the pairs more regular than the intervening ones, no broader than the septa in the rows and becoming granulate on the apical third, each bearing a spaced row of short subrecumbent setae, which are longer and more erect on the apical area. *Legs* rather stout, clothed with coarse pale setae and sparse setiform white scales, the setae being much longer, denser and softer on the lower edge of all the tibiae in the ♂; the hind tibiae of the ♂ deeply excised on the inner edge for more than half their length from the apex, the excision flattened and smooth.

Length, 8–8.75 mm.; *breadth*, 3.2–4.2 mm.

S. RHODESIA: Salisbury, ix. 1893, etc. (G.A.K.M.—type). NYASALAND: Blantyre, iv–v. 1910 (Dr. J. E. S. Old).

The sculpturing of the pronotum will distinguish this insect from all the described species of *Isaniris*, except *I. acuticollis*, Fst., which differs in having the prothorax sharply angulate behind on each side and in lacking the granules on the elytra. In general form and structure it much more resembles such species of *Systates* as *S. brevicollis*, Fst., and *S. crenatipennis*, Frm., but these differ in having only 10 rows of punctures on the elytra, which Faust considered to be the only character separating *Systates* from *Isaniris*.

This weevil occurs very commonly on trees of the genus *Brachystegia*, which form the principal component of the woodland on the Mashonaland plateau; but Mr. R. W. Jack informs me that it is a very general feeder, attacking various cultivated plants, including citrus trees.

Systates exaptus, sp. nov. (Pl. vii, fig. 2).

Colour black, with brownish grey scaling, which is sufficiently thin on the pronotum and disk of the elytra for the shiny integument to show through, but is denser at the sides and especially on the declivity of the elytra; above the declivity an ill-defined common transverse dark chevron-shaped patch, the posterior edge of which is deeply sinuated.

♂♀. *Head* obsoletely punctate, the forehead with a short deep median furrow; the furrow separating it from the rostrum almost straight; the eyes strongly convex, deepest in the middle. *Rostrum* as long as broad (♀) or slightly longer than broad (♂), subparallel-sided in its basal half, then gradually dilated to the apex; the dorsal area alutaceous, shallowly impressed on each side of the sharp median carina, the lateral margins with shallow confluent punctures, very slightly costate, parallel in the basal half, then gradually diverging; the central carina broadly forked a little beyond the middle, the fork enclosing a large smooth subtriangular impressed area just behind the epistome; a low longitudinal ridge running from the scrobe to the eye. *Antennae* with the scape slender, cylindrical, abruptly clavate and clothed with recumbent white setae and narrow setiform scales; formula of funicle: 1, 2, (3, 7), (4, 5, 6). *Prothorax* broader than long, gently rounded at the sides, broadest at the middle; the apex truncate or shallowly sinuate, a little narrower than the base, which is feebly marginate; the dorsum closely set throughout with low contiguous shiny granules, each bearing a puncture containing an erect scale-like seta; laterally the granules are much reduced and interspersed towards the base with coarse shallow punctures. *Elytra* without any truncate margin at the base, very broadly ovate in the ♀, much narrower in the ♂, widest not far from the base, the shoulders broadly rounded, the posterior declivity steep in the ♂ and almost perpendicular in the ♀; the striae rather shallow, closely punctate, the punctures as broad as (♂) or narrower than (♀) the intervals, each of the latter bearing a single row of short erect flattened setae; the scales small, narrowly ovate, the palest ones broader. *Legs* with short pale setae and narrow scales; all the tibiae denticulate internally in both sexes, the hind pair in the ♂ broader, with the inner face flattened and smooth throughout and incurved at the apex, the lower edge deeply bisinuate and with an obtuse tooth a little before the middle; in the ♀ the hind tibia has a short smooth shallow hollow on the inner face near the apex. *Venter* of ♂ with two widely separated small tubercles near the posterior edge of the 1st segment.

Length, 6·5–7·5 mm. ; *breadth*, 3–3·6 mm.

S. RHODESIA: Salisbury. i. 1895—ii. 1905 (*G.A.K.M.*—type); Umtali, xi. 1901 (*G.A.K.M.*); Mpudzi R., Umtali dist., xi. 1901 (*G.A.K.M.*); Mt. Chirinda, Melssetter dist., ii. 1907 (*C. F. M. Swynnerton*).

This common species appears to feed on a number of different herbaceous plants, and the adults have been observed by Mr. R. W. Jack to do appreciable injury to young maize plants.*

* The following closely allied species occurs on the coast in the same latitude:—*Systates beiranus*, sp. n.—Closely resembling *S. exaptus* in form and colouring, but smaller and differing in the following particulars: rostrum with the dorsal area slightly convex longitudinally in the basal half, the anterior impressed portion not triangular, but separated off by a low transverse ridge; no longitudinal ridge behind the scrobe; the epistome slightly asymmetrical, the apex of the curve formed by the delimiting carina being a little to the left of the median line, and the carina on the right side rather longer and higher than that on the left; the prothorax with a very low median costa in the anterior half; the hind tibiae of ♂ smooth and flattened internally, but less incurved at the apex and without any tooth on the lower edge; the elytra vertically truncate at the base; 1st ventrite without tubercles in ♂. *Length*, 5–6 mm. ; *breadth*, 2·4–3 mm. PORTUGUESE EAST AFRICA: Beira, x.1900—x.1904 (*P. A. Sheppard*); 3 ♂♂, 7 ♀♀.

Systates chirindensis, sp. nov.

♂ ♀. Dull black, uniformly and thinly clothed with very small grey or light brown scales, sometimes with a greenish reflection; in the ♀ only there is a large common triangular denuded dark patch at the top of the declivity with its apex directed backwards.

Head separated from the rostrum by a straight furrow, impunctate, and with a shallow median furrow that is longer than half the transverse one; the eyes moderately convex, deepest in the middle. *Rostrum* a little broader than long, very slightly narrowed from the base to the middle, then gradually widening to the apex; the dorsal area almost flat, finely alutaceous, parallel-sided to the middle and then dilated, the margins slightly costate and very shallowly punctate, the median carina low and broadly forked beyond the middle, the fork enclosing a shallowly impressed subtriangular smooth bare area; no costa behind the scrobe. *Antennae* long and very slender, clothed with sparse fine recumbent setae; the scape cylindrical, abruptly clavate; the relative lengths of the joints of the funicle thus: 1, 2, 3 (4, 5), (6, 7). *Prothorax* somewhat broader than long, moderately rounded at the sides, broadest a little before the middle, truncate at base and apex, the former not marginate and a little broader than the apex; the dorsum evenly set with low shiny granules, each with a setigerous puncture; laterally the granules are much reduced. *Elytra* very narrowly ovate in the ♂, much broader in the ♀, without any truncate margin at the base, the apices jointly rounded and produced downwards like a beak, especially in the ♀; the striae shallow and containing punctures that are deep towards the base but diminish much behind; the intervals broader than the punctures, slightly convex, each with a row of small low setigerous granules, the setae being longer and thinner in the ♀, and also duplicated on the declivity of interval 1 in that sex. *Legs* thinly clothed with narrow pale scales, the hind femora with a broad dark band in the middle; in the ♂, the front tibiae slightly bent inwards at two-thirds from the base and denticulate internally, the mid pair also denticulate and the lower edge very strongly curved in the apical half, the hind pair only slightly curved, the inner face broadly flattened and smooth almost to the base, with a single row of granules along its lower edge in the apical half and the upper edge granulate; in the ♀, the tibiae only slightly curved, the hind pair with a smooth flat area on the inner face bounded above and below with a row of granules. *Venter* with ventrite 1 in the ♂ very broadly impressed at the base and with two widely separated small conical tubercles on the hind margin.

Length, 6.4–8 mm.; *breadth*, 2.6–3.6 mm.

S. RHODESIA: Mount Chirinda, 4,000 ft., xii. 1901 and x. 1905 (G.A.K.M.). Described from 14 ♂♂ and 15 ♀♀.

From the very few species of *Systates* having granulated elytra, such as *S. granosus*, Fst., this insect may be distinguished by the absence of the vertically truncate edge at the base of the elytra.

In 1915, Mr. C. F. M. Swynnerton found the adults of this species feeding in numbers on the leaves of coffee bushes on Mt. Chirinda.

Subfamily CRYPTORRHYNCHINAE.

Genus **Elytroteinus**, nov. nom.

Pteroporus, Fairmaire (*nec* Schönh. 1843), Ann. Soc. Ent. France, 1881, p. 307.

To the generic characters given by Fairmaire the following may be added :— The mesosternum parallel-sided, much broader than one of the mid-coxae, the posterior edge of the cavity markedly overhanging; the intercoxal process of the metasternum very broadly truncate, no metepisternal suture; ventrite 2 in the middle much longer than 3 + 4; the elytra with stria 10 complete, and the lateral margin rather strongly sinuate at the base; the front femora with a stout tooth, and all the femora very shallowly sulcate beneath; the tibiae with a sharp carina on the dorsal edge; the tarsal claws simple and divaricate.

Elytroteinus subtruncatus, Frm. (Pl. vii, fig. 8).

This is the only known species of the genus and was originally described from Fiji (*op. cit.* p. 308), but it has recently been found by Mr. O. H. Swezey at Honolulu attacking the roots of ginger (*Hedychium coronarium*).

Subfamily CALANDRINAE.

Calandra shoreae, sp. nov. (Pl. vii, fig. 4).

♂♀. Colour dull black or piceous, without scaling; the rostrum, legs and antennae red-brown.

Head with three transverse rows of punctures behind the eyes, the forehead with an elongate fovea. *Rostrum* elongate, slightly curved, gradually widened at the apex, with four dorsal rows of punctures and three lateral ones on each side, of which the uppermost disappears in the basal half; in the ♀ the rostrum is very little longer than that of the ♂ and the punctures are finer. *Antennae* with joints 3 to 5 of the funicle about as long as broad, the others longer. *Prothorax* a little longer than broad, widest near the base, the sides slightly rounded and gradually narrowed to the apical constriction; the base slightly rounded in front of the scutellum and truncate on each side, the apex broadly sinuate; the dorsum coarsely and closely punctate, the transverse septa between the punctures being narrower and lower than the longitudinal ones, producing the effect of numerous undulating longitudinal carinae; the median carina well-marked, fairly straight, and running from the apical constriction almost to the base; each puncture with a very short stout erect pale seta. *Elytra* with the usual sculpturing characteristic of the genus, intervals 1, 3, 5, 7 and 9 being rather higher and much broader than the others, and each with a row of punctures almost as large as the quadrate ones in the striae; the posterior callus feeble, and intervals 3 and 9 not elevated at the apex. *Abdomen* with the exposed part of the pygidium forming almost an equilateral triangle, flat and coarsely scrobiculate.

Length, 3·2–4·4 mm.; *breadth*, 1·2–1·8 mm.

INDIA: Dehra Dun, United Provinces (*C. F. C. Beeson*); Kheri, U.P. (*Beeson*); Gorakpur, U.P. (*A. E. Osmaston*); Shwegu, Burma (*Beeson*); Pusa, Bengal; Adoni, Bellary dist., Madras; Pattikonda, Kurnul, Madras; Waltair, Madras (*S. W. Kemp*); Nilgiri Hills (*H. L. Andrewes*). MAURITIUS (*J. E. M. Brown*).

Very closely allied to *Calandra sculpturata*, Gyl., from South and East Africa,* which has the pronotum somewhat similarly sculptured, but the longitudinal carination is not so well marked in the basal half and the median carina is less distinct in the African species; this also has a small spot composed of a few pale scales in the middle of the base of the pronotum, and another on the shoulder of each elytron; and the exposed part of the pygidium is more elongate and transversely convex. *C. shoreae* attacks the seeds of the sal tree (*Shorea robusta*), as well as those of *Dipterocarpus turbinatus*.

Prof. A. Hustache had already drawn up an M.S. description of this species upon two specimens from Mauritius, but he has kindly suggested that the present description should be published instead.

***Calandra glandium*, sp. nov.** (Pl. vii, fig. 3).

Closely allied to the foregoing species, and differing principally in the following characters:—A rather larger insect and longer in proportion to its breadth; rostrum of the ♀ finely aciculate, rather dull, and as strongly punctate as that of the ♂ of *C. shoreae*; the rostrum of the ♂ much shorter and straighter, rugosely punctate and with four dorsal rows of minute granules; the pronotum with large reticulate punctures, all the interspaces being equally raised and the median carina usually indefinite and abbreviated; the elytra longer in proportion, the posterior callus more developed and intervals 3 and 9 elevated at the apex, so that the apical junction of striae 3 and 8 lies in a deep impression; the rugose area of the pygidium more elongate and with a sharp median longitudinal carina.

Length, 4.6–5.2 mm.; *breadth*, 1.6–1.8 mm.

INDIA: W. Almora, Kumaon, numerous specimens bred from acorns of *Quercus incana* (H. G. Champion—type); Naini Tal, Kumaon, bred from acorns of *Quercus dilatata* (E. Marsden).

***Stenommatius musae*, sp. nov.** (Pl. vii, fig. 7).

Colour dull piceous black, usually with a greyish sheen; the antennae, legs and apical portion of the rostrum red-brown.

Head short globular, smooth, rather shiny, with minute sparse punctures; the eyes actually contiguous beneath. *Rostrum* (♀) elongate, as long as the head and prothorax together, slightly curved, moderately stout, almost cylindrical but somewhat flattened beneath, not dilated at the apex, opaque and with small close shallow punctures for four-fifths of its length, the apical fifth impunctate and very shiny; a deep lanceolate median furrow from the base to the antennae; the lower surface impunctate, with a low shiny median carina; colour red-brown, with only the basal third or fourth part blackish; in the ♂, a little shorter and broader proportionately, and blackish from the base to the middle or beyond. *Antennae* with

* Schönherr records this species from Bengal, but his description agrees well with a South African species. Prof. Aurivillius has kindly confirmed the identification on comparing one of my African specimens with the type of *C. sculpturata*, which, he informs me, bears the label "Cap. B. spei ? Drège." The Indian record seems almost certainly erroneous. Drège resided in South Africa, and all the other species described from his collection by Schönherr are from that country.

the scape short, just reaching the eye. *Prothorax* a little longer than broad, the sides subparallel from the base to beyond the middle, then roundly narrowed and very deeply constricted near the apex, the constriction continued across the dorsum as a deep curved furrow; the apical margin truncate or very slightly sinuate, the base truncate; the dorsum gently convex transversely and evenly set throughout with small separated punctures, the interspaces being as broad as the punctures themselves; on the sides the punctures are rather larger and much closer together. *Elytra* elongate-ovate, slightly sinuate jointly at the base, and without any humeral prominence; the sides gently curved, broadest at a short distance from the base, then rather rapidly narrowing to the apex, which is broadly rounded; the striae containing rows of shallow distant punctures, which encroach slightly on the sides of the convex impunctate intervals.

Length, 1.6–1.8 mm.; *breadth*, 0.6–0.7 mm.

HAWAIIAN IS. : 2 ♂♂, 8 ♀♀, Kaimuki, Oahu, 19.ii.1920 (*O. H. Swezey*).

The genotype, *S. fryi*, Woll., from Mexico, differs in its slightly larger size; the scape extends behind the eye; the eyes are not quite confluent beneath; the head is opaque and coarsely punctate; the rostrum is markedly shorter; the prothorax is broader and much more coarsely punctate, the interspaces being much narrower than the punctures, etc.

This species was found by Mr. Swezey breeding in numbers in the root (corm) of a banana plant.
